

AMENDMENTS TO THE CLAIMS

Cancel claims 1-22.

23. (Currently Amended) A method according to claim 22 further for aqueous treatment of leather, comprising:
cleaning the leather;
a first soaking of the leather in an antimicrobial composition in the presence of an emulsifier wherein the antimicrobial composition comprises a biguanide bactericide and a fungicide and wherein the fungicide and biguanide bactericide are present in the composition in a ratio between about 1:50 to about 10:1 fungicide to biguanide bactericide;

a first soaking of the leather in fat liquors and wherein the first soaking of the leather in an antimicrobial composition occurs prior to or concurrent with the first soaking of the leather in fat liquors;

soaking the leather in an aqueous solution containing a tanning agent; and rinsing the leather.

24. (Currently Amended) A The method according to claim 23, further comprising:

a second soaking of the leather in fat liquors; and

a second soaking of the leather in an antimicrobial composition;

wherein said the second soaking of the leather in an antimicrobial composition occurs prior to or concurrent with the second soaking of the leather in fat liquors.

25. (Currently Amended) A The method according to claim 24 further comprising: the step of
rinsing the leather between the first soaking in fat liquors and the second soaking in fat liquors.

26. (Currently Amended) A The method according to claim 23 wherein the step of soaking the leather in a an aqueous solution of tanning agent occurs prior to the first soaking of the leather in an antimicrobial composition.

27. (Currently Amended) A The method according to claim 23 wherein the step of soaking the leather in a an aqueous solution of tanning agent occurs after the first soaking of the leather in an antimicrobial composition.

28. (Currently Amended) A The method according to claim 22 23 wherein the fungicide is present in the antimicrobial composition between about 200 ppm and about 5,000 ppm, and the biguanide bactericide is present in the composition between about 500 ppm and about 10,000 ppm.

Cancel claims 29-30.

31. (Currently Amended) A The method according to claim 29 23 wherein the biguanide bactericide is polyhexa-methylene biguanide.

32. (Currently Amended) A The method according to claim 22 23 wherein the fungicide is selected from the group consisting of tolyldiiodomethylsulfone, zinc 2-pyridinethiol-1-oxide, propiconazole, thiabendazole, and tebuconazole.

33. (Currently Amended) A The method according to claim 32 23 wherein said the fungicide is tolyldiiodomethylsulfone.

34. (Currently Amended) A The method according to claim 3 23 wherein the step of first soaking of said the leather in said the antimicrobial composition comprises exhausting said the fungicide and bactericide into the interior of said the leather.

35. (Currently Amended) A The method according to claim 22 23 wherein said the leather is soaked in said the antimicrobial composition for a time sufficient to exhaust at least 1000 ppm of said the fungicide and at least 1000 ppm of said the bactericide into said the leather.

Cancel claim 36.

37. (Currently Amended) A The method according to claim 22 23, further comprising: the step of
finishing the leather.

38. (Currently Amended) A The method according to claim 37, further comprising forming products a product from said the finished leather.

39. (Currently Amended) A method according to claim 38 wherein said products include clothing, shoes, boots, coats, baggage, clothing accessories, tents, outdoor equipment, and the product is a clothing article, a shoe, a boot, a coat, baggage, a clothing accessory, a tent, outdoor equipment, or upholstery.

40. (New) The method according to claim 23 wherein the fungicide is zinc 2-pyridinethiol-1-oxide.

41. (New) The method according to claim 23 wherein the fungicide is propiconazole.

42. (New) The method according to claim 23 wherein the fungicide is thiabendazole.

43. (New) The method according to claim 23 wherein the fungicide is tebuconazole.

44. (New) The method according to claim 23 wherein the fungicide and biguanide bactericide are present in the composition in a ratio between about 1:50 to about 5:1 fungicide to biguanide bactericide.

45. (New) A method for making an antimicrobial leather, comprising:
a first soaking of a cleaned leather in an antimicrobial composition in the presence of an emulsifier, wherein the antimicrobial composition includes:
a biguanide bactericide having a concentration in the composition of about 500 ppm to about 10,000 ppm based on the weight of the leather, and
a fungicide having a concentration in the composition of about 200 ppm to about 5,000 ppm based on the weight of the leather,
wherein the biguanide bactericide and fungicide are present in the composition in a ratio between about 1:50 to about 10:1 fungicide to biguanide bactericide;
a first fatliquoring of the leather in a first fat liquor; and
wherein the first soaking of the leather in an antimicrobial composition occurs prior to or concurrent with the first fatliquoring.

46. (New) The method of claim 45, further comprising:
a second fatliquoring of the leather in a second fat liquor; and
a second soaking of the leather in the antimicrobial composition in the presence of an emulsifier;
wherein the second soaking of the leather in a second antimicrobial composition occurs prior to or concurrent with the second fatliquoring of the leather.

47. (New) The method of claim 46 further comprising:
rinsing the leather between the first fatliquoring and the second fatliquoring.

48. (New) The method of claim 45 wherein the antimicrobial composition further comprises triclosan.

49. (New) The method of claim 45 wherein the antimicrobial composition further comprises poly(oxyethylene-(dimethylimino)ethylene(dimethylimino)ethylenedichloride).

50. (New) The method of claim 45 wherein the antimicrobial composition further comprises isothiazolinone.

51. (New) The method of claim 45 wherein the antimicrobial composition further comprises a quaternary ammonium compound.

52. (New) The method of claim 45 wherein the fungicide is selected from the group consisting of tolyldiiodomethylsulfone, zinc 2-pyridinethiol-1-oxide, propiconazole, thiabendazole, and tebuconazole.

53. (New) The method of claim 52 wherein the fungicide is tolyldiiodomethylsulfone.
54. (New) The method of claim 52 wherein the fungicide is zinc 2-pyridinethiol-1-oxide.
55. (New) The method of claim 52 wherein the fungicide is propiconazole.
56. (New) The method of claim 52 wherein the fungicide is thiabendazole.
57. (New) The method of claim 52 wherein the fungicide is tebuconazole.
58. (New) The method of claim 45 wherein first soaking of the leather in the antimicrobial composition comprises exhausting the fungicide and biguanide bactericide into the interior of the leather.
59. (New) The method of claim 45 wherein the fungicide and biguanide bactericide are present in the composition in a ratio between about 1:50 to about 5:1 fungicide to biguanide bactericide.
60. (New) A leather article produced by the process of claim 44.
61. (New) The method of claim 60 wherein the leather article is a clothing article, a shoe, a boot, a coat, baggage, a clothing accessory, a tent, an outdoor equipment, or upholstery.
62. (New) A method for making an antimicrobial leather, comprising:
a first soaking of a cleaned leather in an antimicrobial composition in the presence of an emulsifier, wherein the antimicrobial composition includes:
 isothiazolinone having a concentration in the composition of about 500 ppm to about 10,000 ppm based on the weight of the leather, and
 a fungicide having a concentration in the composition of about 200 ppm to about 5,000 ppm based on the weight of the leather,
 wherein the isothiazolinone and fungicide are present in the composition in a ratio between about 50:1 to about 1:5 isothiazolinone to fungicide;
 a first fatliquoring of the leather in a first fat liquor; and
 wherein the first soaking of the leather in an antimicrobial composition occurs prior to or concurrent with the first fatliquoring.
63. (New) The method of claim 62 wherein the fungicide is selected from the group consisting of tolyldiiodomethylsulfone, zinc 2-pyridinethiol-1-oxide, propiconazole, thiabendazole, and tebuconazole.
64. (New) The method of claim 63 wherein the fungicide is tolyldiiodomethylsulfone.

65. (New) The method of claim 63 wherein the fungicide is propiconazole.
66. (New) The method of claim 63 wherein the fungicide is thiabendazole.
67. (New) The method of claim 63 wherein the fungicide is tebuconazole.
68. (New) The method of claim 62 wherein first soaking of the leather in the antimicrobial composition comprises exhausting the fungicide and isothiazolinone into the interior of the leather.